REMARKS/ARGUMENTS

Favorable reconsideration of this application, in light of the following discussion, is respectfully requested.

Claims 1-8 and 16 are pending in this application. Claims 1 and 6-8 are amended and Claim 16 is added by the present response. The changes and additions to the claims are believed to find support in the disclosure as originally filed, at least at, page 25, line 26 to page 26, line 4 and thus are not believed to raise a question of new matter.

In the outstanding Office Action, Claims 6, 7, 8 and 13-15 were objected to as including informalities; and Claims 1-15 were rejected under 35 U.S.C. §102(b) as anticipated by Yoda et al. (JP 59-192943, herein "Yoda").

Applicants respectfully traverse the rejection of Claims 1-15 under 35 U.S.C. §102(b) as anticipated by Yoda.

Amended Claim 1 recites, in part,

> imaging optics which forms an optical image of a pattern formed on a plate to be inspected based on designed pattern data;
> a detected pattern data generator which detects the optical image to generate detected pattern data;
> a reference pattern data generator which generates first reference pattern data from the designed pattern data, the first reference pattern data being a reference data corresponding to the detected pattern data;
> a first comparator which compares the detected pattern data with the first reference pattern data to detect a defect of the pattern formed on the plate;
> a first memory which, when there are a plurality of repeated pattern areas on the plate, stores pattern data obtained by detecting an inspection area, which is one of the plurality of repeated pattern areas, as second reference pattern data;
> a second comparator which compares the detected pattern data with the second reference pattern data to detect the defect of the pattern formed on the plate; and
> a computer which reads an arrangement, a number, a dimension and a repeated pitch of the plurality of repeated pattern areas from the designed pattern data, and stores the inspection area as a basis of the second reference pattern data.

Thus, the pattern inspection apparatus of the claimed invention comprises a comparator in which two comparators, a die-to-database comparator 18a and a die-to-die comparator 18b, are disposed as illustrated in a non-limiting example in FIG. 2. The pattern inspection apparatus also comprises a reference pattern data generator generating first reference pattern data from designed pattern data. The first reference pattern data is input to the die-to-database comparator 18a.

The computer in the pattern inspection apparatus of the claimed invention reads the arrangement, number, dimension and repeated pitch of a plurality of repeated pattern areas and automatically stores an inspection area as a basis of second reference pattern data. For example, in the configuration shown in FIG. 1, this function is carried out by a computer 20 and a bit pattern data generation circuit 21.

In contrast, the pattern inspection apparatus described in Yoda, comprises only a die-to-die comparator. More specifically, picture signals 810 obtained at a line sensor 10 are converted to digital signals 811 by an AD converter 11 and sent to a comparison circuit 13 and a delay circuit 12. The delay circuit 12 outputs signals S12 which will be input to the comparison circuit 13 together with the digital signals S11 sent from the AD converter 11 in the same timing. The signals are then compared and the comparison result is judged by a defect determination circuit 14 to be sent to a defect data storage circuit 15. The defect data storage circuit 15 stores the position of a moving platform and the scanning coordinates "y" in the line sensor at this time.[1] In addition, a computer 19 retrieves defect coordinates from the defect data storage circuit 15 for recording or displaying purposes.[2]

Thus, it is clear that the pattern inspection apparatus of Yoda comprises only one comparator. However, the outstanding Action cites, page 6, lines 1-3 and 9-25 of Yoda, as

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[1] see the translation of Yoda (JP 59-192943), page 7, lines 1-4.
[2] see Yoda, page 8, lines 5-10.

evidencing that <u>Yoda</u> teaches two comparators. However, in both of those citations, the

reference is describing the same comparison circuit 13.

Furthermore, the defect data storage circuit 15 of <u>Yoda</u> is used for storing position

data, not pattern data, as is recited in the claimed invention. In addition, the apparatus of

<u>Yoda</u> does not have a reference pattern data generator as in the claimed invention, which

generates reference pattern data corresponding to detected pattern data from designed data

within the pattern inspection apparatus.

Accordingly as the <u>Yoda</u> does not teach or suggest all of the features recited in

amended Claim 1, Applicants respectfully submit that amended Claim 1 and Claims 2-8 and

16 depending therefrom patentably distinguish over <u>Yoda</u>.

Consequently, in light of the above discussion and in view of the present amendment,

the present application is believed to be in condition for allowance and an early and favorable

action to that effect is respectfully requested.

Respectfully submitted,

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